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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,708	03/06/2002	Hansen Yuan	2153 CIP DIV	7922

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EXAMINER

REIMERS, ANNETTE R

ART UNIT

PAPER NUMBER

3733

DATE MAILED: 08/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/091,708

Applicant(s)

YUAN ET AL.

Examiner

Annette R. Reimers

Art Unit

3733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 April 2006 and 02 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 9, 11-13, 15-18, 20, 22 and 69-100 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 71-80 is/are allowed.
- 6) ☒ Claim(s) 1-6, 9, 11-13, 15-18, 20, 22, 69, 70, 81-83, 86-89 and 91-100 is/are rejected.
- 7) ☐ Claim(s) 84, 85 and 90 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>05/18/06</u> | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION*****Priority***

The later-filed application must be an application for a patent for an invention, which is also disclosed in the prior application/patent (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application/patent and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994). The disclosure of the prior-filed abandoned application, Application No. 09/167,439 and parent patent 6,090,111, each fail to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application, i.e., claims 71-100. It is noted that abandoned application 09/167,439 and parent patent 6,090,111 each fail to disclose the upper portion and the lower portion of the locking cap coupled together by an axial post, as required by claim 71, and the first and second portions of the locking cap being mechanically joined for rotation relative to one another, as required by claim 81. Thus, the effective filing date for claims 1-6, 9, 11-13, 15-18, 20, 22 and 69-70 is 06/17/1998, and the effective filing date for claims 71-100 is 01/19/2000.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 9, 11-13, 15-18, 20, 22 and 69-70 are rejected under 35 U.S.C. 102(b) as being anticipated by Puno et al. (US Patent Number 5,360,431).

Puno et al. disclose a device for securing a spinal rod to the spine comprising a head portion, 23, having a channel extending therethrough configured to receive a spinal rod 18, a locking cap with an upper portion, 27, and lower portion, 25, and discontinuous opposed arcuate engagement flanges, 46 and 47, configured to engage an interior camming surface of the channel and an exterior surface of the spinal rod upon rotation of the locking cap relative to the head portion through a 90° arc from an unlocked position to a locked position to secure the position of the head portion relative to the spinal rod, and a fastener portion, 21, including a spherical head, 30, and a threaded body, 21, depending from the head portion, wherein the fastener portion is movable relative to the head portion when the locking cap is in the unlocked position and the fastener portion is fixed relative to the head portion when the locking cap is in the locked position (see figures 2-7).

The channel of the head portion is bounded by opposed sidewalls, wherein each of the opposed sidewalls has an arcuate engagement slot defined therein, 51 and 52 (see figure 3). The discontinuous opposed arcuate engagement flanges are configured

Art Unit: 3733

for reception in the opposed arcuate engagement slots of the head portion upon rotation of the locking cap relative to the head portion (see figure 3 and column 6, lines 9-14). The opposed engagement slots are each defined in part by inclined slot surfaces, with the angle of the inclined slot surface of one engagement slot being opposite that of the opposed engagement slot, and wherein the opposed engagement flanges are each defined in part by inclined flange surfaces, with the angle of the inclined flange surface of one engagement flange being opposite that of the opposed engagement flange (see figure 3). The inclined slot surfaces and the inclined flange surfaces are angularly tapered to complement each other (see figure 3).

The locking cap is capable of rotation between an initial position in which the arcuate engagement flanges are 90° out of phase with the arcuate engagement slots, an intermediate position in which the arcuate engagement flanges are 45° out of phase with the arcuate engagement slots and a locked position in which the arcuate engagement flanges are in phase and intimately engaged with the arcuate engagement slots (see figures 2-7). A bottom surface of the locking cap includes elongate recess, 72, oriented to accommodate a spinal rod when the locking cap is in the initial position (see figures 2-7). The locking cap has a cylindrical head, which includes a hexagonal bore for receiving a work implement (see column 6, lines 18-20).

With regard to the statement of intended use and other functional statements, they do not impose any structural limitations on the claims distinguishable over Puno et al., which is capable of being used as claimed if one so desires to do so. *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Art Unit: 3733

Furthermore, the law of anticipation does not require that the reference "teach" what the subject patent teaches, but rather it is only necessary that the claims under attack "read on" something in the reference. *Kalman v. Kimberly Clark Corp.*, 218 USPQ 781 (CCPA 1983). Furthermore, the manner in which a device is intended to be employed does not differentiate the claimed apparatus from prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Claims 81, 83, 86-89, 91, 95-97 are rejected under 35 U.S.C. 102(b) as being anticipated by Link (WO 97/37604).

Link discloses a device for securing a spinal rod to the spine comprising a head portion having a channel extending therethrough configured to receive a spinal rod, 5, and opposed side walls, 3, each having an arcuate slot therein, 6, a locking cap with a first portion, 7, having opposed arcuate engagement flanges, e.g. 10, with inclined surfaces, (see figure 1), wherein the flanges are receivable in the arcuate engagement slots of the head portion when the locking cap is rotated into a locked position, and a second portion, 14, having an elongated recess (see figures 1-3) engagable with the exterior surface of the spinal rod, the first and second portions of the locking cap being mechanically joined for rotation relative to one another, and a fastener portion, 1, depending from the head portion for engaging the spine (see figures 1-3). The locking cap further comprises an axial post, 13, extending between the first and second portions thereof for mechanically joining the upper and lower portions of the locking cap (see figure 1).

With regard to the statement of intended use and other functional statements, they do not impose any structural limitations on the claims distinguishable over Link, which is capable of being used as claimed if one so desires to do so. *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Furthermore, the law of anticipation does not require that the reference "teach" what the subject patent teaches, but rather it is only necessary that the claims under attack "read on" something in the reference. *Kalman v. Kimberly Clark Corp.*, 218 USPQ 781 (CCPA 1983). Furthermore, the manner in which a device is intended to be employed does not differentiate the claimed apparatus from prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 82, 92-94 and 98-100 are rejected under 35 U.S.C. 103(a) as being unpatentable over Link (WO 97/37604) in view of Puno et al. (US Patent Number 5,360,431).

Link discloses the claimed invention (see above) except for the fastener portion having a spherical head and a threaded body. Puno et al. disclose a device for securing a spinal rod to the spine comprising a fastener portion, 21, including a spherical head, 30, and a threaded body, 21 (see figures 2-7) and teach that the screw is separate from

Art Unit: 3733

the anchor seat in order to provide limited motion between the anchor seat and the vertebrae and to act as a shock-absorber (see column 3, lines 64-68 and column 4, lines 1-5). It would have been obvious to one skilled in the art at the time the invention was made to construct the device of Link the fastener portion having a spherical head and a threaded body, in view of Puno et al., in order to provide limited motion between the anchor seat and the vertebrae and to act as a shock-absorber.

***Allowable Subject Matter***

Claims 71-80 are allowed.

Claims 84-85 and 90 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments with respect to claims 1-6, 9, 11-13, 15-18, 20, 22 and 69-70 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO 892 for art cited of interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Annette R. Reimers whose telephone number is (571) 272-7135. The examiner can normally be reached on Monday-Friday.



Art Unit: 3733

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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EDUARDO C. ROBERT  
SUPERVISORY PATENT EXAMINER